neſs of a ſmall Star; from the Compariſon of which with the Tail the Brightneſs of the latter may in ſome ſort be collected: The Tail appear'd ſharper, and not ſo much ſpread in the two following Obſervations, and in the laſt did not exceed one third Part of the firſt Length; it was then of a much darker Colour, which made the Difference between that and the Head more obſervable, the Head yet appearing ſufficiently bright. For ſome following Nights his Lordſhip's Obſervations were interrupted by cloudy Weather, after which the Comet was ſo far diminiſh'd, as only to be known by its Motion, its Appearance being no ways diſtinguiſhable from that of a ſmall nebuloſe Star.

III. *Obſervatio ejuſdem Cometæ ab Illuſtriſſimo Domino* Franciſco Bianchini *habita* Albani *Menſe* Octobri, 1723. *& ab eodem Ulyſipponem miſſa* P. Joanni Baptiſtæ Carbone *Soc JESU. Commuuicavit* Iſaacus Samuda, *M. D. Col. Med.* Lond. *L. S. R. S.*

DIE 17 *Octobris*, poſtquam Jovialium Comitum ſitum obſervaſſem fortè in Conſtellationem *Capricorni* oculos conieci; cumque aſtra ſingula percurrerem, in quamdam veluti nebuloſam ſtellam incidi, cæteris ſane grandiorem, quam tamen ibidem loci numquam antea obſervaram. Rei novitate perſcrutaturus, eo Teleſcopium direxi, ſtatimque Cometen eſſe deprehendi; ſiquidem tenuiſſimæ nebulæ globus apparuit, ejuſque in medio veluti lucidus nucleolus. Idem quoque nudis oculis diſcernere licuit; & præ-

ter nebulam, ſeu Cometæ atmoſphæram, brevem quoque caudam, quæ ad orientem vergebat, eratque hujuſmodi. [*Fig.* 4.]

Ne me igitur ea occaſio præteriret, conſuetas circa illum obſervationes inſtitui, ut ejus Longitudinem, Latitudinem, propriumque motum deprehenderem.

Et quidem prima nocte, die nempe 17. ſupradicta, tranſiit per Meridianum (qui penè cum Romano coincidit) circa horam ſeptimam 44′ poſt Merid. ejuſque diſtantia à Zenith, 69° 29′.

Hora 8. 11′ 30″ diſtantia Cometæ à *Fomahant Aquarii*, intercepta eſt, 20° 33′ & hora 8. 17′ 30″ diſtabat à Stella β in humero dextero *Aquarii*, 21° 8′. Proindeque verſabatur Cometes in 11° 54′. *Aquarii*, cum Latitudine Auſtrali ab Ecliptica 11° 10′ circiter.

Die 21. erat adeo proximus Stellæ ε in Lino ſupra manum ſiniſtram *Aquarij*, quàm ipſa ε eſt proxima Stellæ μ minori in eodem Lino, conſtituebatque Cometes cum utraque Stella ε, μ rectam Lineam, ſic [*Fig.* 5.] Ex hac igitur obſervatione, & ex Aſcenſionis rectæ nec non declinationis differentiâ inter Cometen, & ſupradictam Stellam ε quam diligentiſſime obſervavi, infertur locus Cometæ fuiſſe in 6° 45′. *Aquarii* cum Latitudine Boreali ab Eclipt. 8° 5′.

Hinc etiam infertur qualis Cometæ motus proprius fuerit, & quale iter; per planum ſcilicet circuli maximi ſecantis Eclipticam in gradu 9 *Aquarii*, & conſtituentis cum eadem Ecliptica angulum 80 gradum circiter.

Reliquis diebus eadem ſemper proportione movebatur, magiſque in dies elongari à terra viſus eſt.

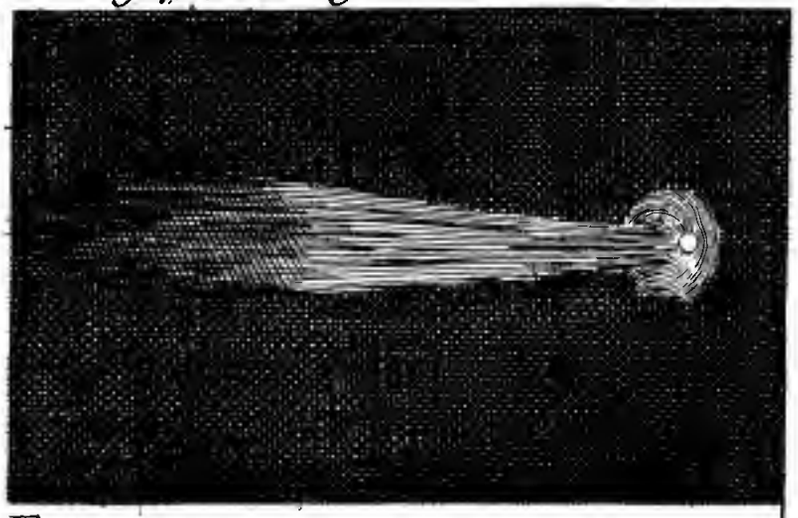
Paral-

Parallaxim nullam ſenſibilem, etſi pluries inten taverim, deprehendere potui; proindeque maxima ejus diſtantia à terra credenda eſt.

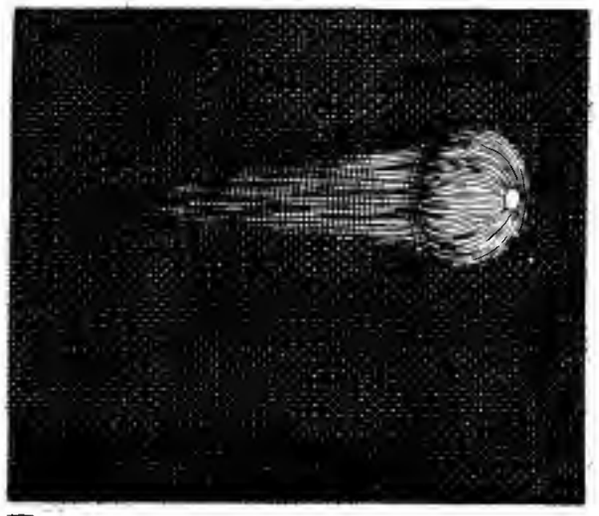
Hactenus Illuſtriſſimus Dominus *Franciſcus Bianchini* in Mathematicis Scientiis apprimè eruditus, & in obſervando, quoad noverim, accuratiſſimus. Ejus obſervatio à noſtra, mea ſcilicet, ac Prioris Dominici *Capaſſi* vix in uno aut altero minuto quoad latitudinem diſcrepavit, cæterùm omninò conformis. Quapropter nec illam hic arbitror apponendam.

IV. *Obſervations about* Waſps, *and the Difference of their Sexes. By the Reverend Mr.* Derham, *F. R. S. Prebendary of* Windſor.

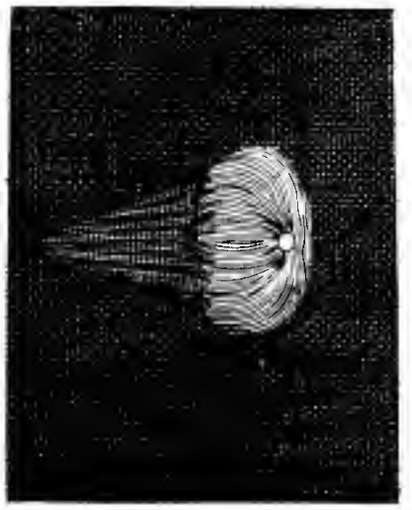
IN the Beginning of *July* laſt 1723. having frequent occaſion to be on the Top of our *Collegiate Chapel* in *Windſor Caſtle*, I obſerved many *Waſps* flying about it, and particularly frequenting a Covering of Deal Boards, and the Pieces of Timber lying on the Leads. I took notice that moſt of theſe *Waſps* were of a larger ſort than uſual, and thought they came thither to gnaw the Wood, and to carry it away in Mouthfuls to build their Neſts; the Artifice of which I have taken notice of in my *Phyſ. Theol.* particularly *B.* 4. *ch.* 11. *note* 21. and *chap.* 13. *not.* 12. But having caught ſome of them, and amongſt the reſt a large *Queen-Waſp* (which ſort of Waſp, by the by, never engages in any Labours of the Colony) I began to be more ſtrict in my Obſervations, and on *July* 6. I obſerved a Cluſter of only three *Waſps* cloſely embracing each other; one of which was a large *Female*



F.1. Friday Oct.r 11.th at 7. in the Evening.



F.2. Sunday Oct.r 13.th at 6. ditto



F.3 Tuesday Oct.r 15.th at 6. ditto

Supposing the Moon to be of this Diameter, the Comet Seem'd to me to be in proportion to this Circle; as above delineated.

Fig. 4.

Fig. 5.

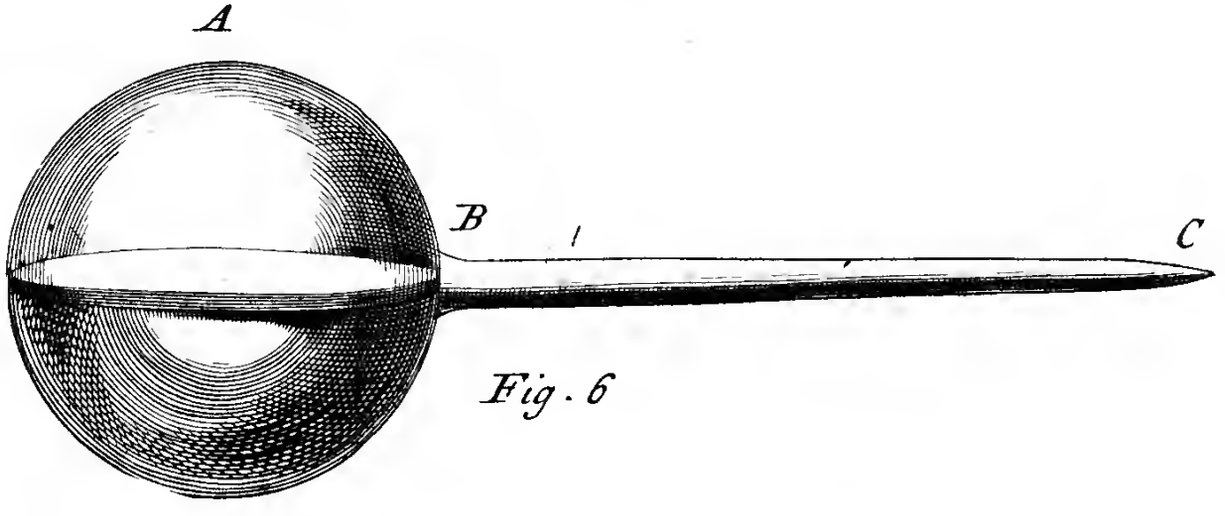


Fig. 6